

## CLAIMS

What is claimed is:

1. A heat exchanger comprising:  
a first thermally conductive tube for conducting a fluid;  
a second thermally conductive tube for conducting a fluid; and  
wherein said first thermally conductive tube forms a first loop and said second thermally conductive tube forms a second loop, said first loop neighboring said second loop.
2. The heat exchanger of Claim 1 wherein said first loop contacts said second loop.
3. The heat exchanger of Claim 1 wherein said first loop and said second loop coil around a common axis.
4. The heat exchanger of Claim 2 wherein said first loop and said second loop coil around said common axis along a generally common angle relative to said common axis.
5. The heat exchanger of Claim 1 including a third thermally conductive tube having a third loop, said third loop neighboring at least one of said first loop and said second loop.

6. The heat exchanger of Claim 5 wherein said third loop coils about a common axis at a generally common angle with said first loop and said second loop.

7. The heat exchanger of Claim 1 including a housing for housing said first loop and said second loop.

8. The heat exchanger of Claim 7 wherein said housing comprises a third tube, said housing having a fluid inlet and a fluid outlet.

9. The heat exchanger of Claim 1 wherein a volume is formed within said first loop and said second loop.

10. The heat exchanger of Claim 9 including a thermally conductive element spaced within said volume.

11. The heat exchanger of Claim 10 wherein said thermally conductive element has a first spiral and said first loop and said second loop form a second spiral, said first spiral spiraling in a first direction and said second spiral spiraling in a second direction opposite said first direction.

12. A heat exchanger comprising:
  - a first thermally conductive tube for conducting a fluid, said first thermally conductive tube forming a first loop;
  - a second thermally conductive tube for conducting a fluid, said second thermally conductive tube forming a second loop;
  - wherein said first loop neighbors said second loop, said first loop and said second loop coiling around a common axis; and
  - a housing for housing said first loop and said second loop, said housing forming a fluid volume around said first loop and said second loop.
13. The heat exchanger of Claim 12 wherein said housing has a first fluid inlet and a first fluid outlet.
14. The heat exchanger of Claim 13 including a second housing having a second fluid volume, said second housing having a second fluid inlet and a second fluid outlet wherein said first fluid outlet is in fluid communication with said second fluid inlet.

15. A method of manufacturing a multiple tube heat exchanger comprising the steps of:

- a) winding a first heat exchanger tube about an axis to form a first loop;
- b) winding a second heat exchanger tube about the axis to form a second loop; and
- c) intertwining the first heat exchanger tube with the second heat exchanger tube such that the first loop neighbors the second loop along the axis.

16. The method of manufacturing the multiple tube heat exchanger of Claim 15 wherein the first heat exchanger tube has a first rotationally free portion and a first fixed portion and the second heat exchanger tube has a second rotationally free portion and a second fixed portion, the first rotationally free portion and the second rotationally free portion free to wind around the axis and the first fixed portion and the second fixed portion fixed against winding around the axis.

17. The method of manufacturing the multiple tube heat exchanger of Claim 16 including the step of:

d) securing the first rotationally free portion and the second rotationally free portion to a fixture; and

e) rotating the fixture to intertwine the first heat exchanger tube with the second heat exchanger tube.

18. The method of manufacturing the multiple tube heat exchanger of Claim 15 including the step of:

f) winding the first heat exchanger tube and the second heat exchanger tube along an axial guide extending along the axis.

19. The method of manufacturing the multiple tube heat exchanger of Claim 18 including the step of:

g) removing the axial guide and replacing the axial guide with a third heat exchanger tube.

20. The method of manufacturing the multiple tube heat exchanger of Claim 18 wherein the axial guide has a spiral pattern on which the first loop of the first heat exchanger tube and the second loop of the second heat exchanger tube are wound.